## **NOSE PAD OF EYEGLASSES**

## **BACKGROUND OF THE INVENTION**

### 5 I. Field of the Invention

This invention relates generally to a nose pad of eyeglasses and, more specifically, to a nose pad of eyeglasses that can be fixed stably, users can install and remove easily, and avoid scratches and breakage during installation and removal.

# 10 II. Description of the Prior Art

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Heretofore, a traditional nose pad of eyeglasses shown in FIG 1 and FIG 2, includes a nose rack 10a, a fastener 20a and a nose pad 30a; an open hole 11a is on the nose rack 10a, an insertion head 22a and a neck 21a are on the fastener 20a. The insertion head 22a passes through the open hole 11a to have the neck 21a in the open hole 11a and to have the fasteners 20a install on the nose rack 10a.

Based on the structure described above, in order to have the fastener 20a and the nose rack 10a combine properly to avoid the fastener 20a from falling, the width of the insertion head 22a must be larger than that of the open hole 11a. Even though the top of the insertion head 22a is in smooth curve shape and easy for the insertion head to insert, users have to push hard to have the insertion head 22a into the open hole 11a, the

operation consumes lots of time and strength. The width of the insertion head 22a is larger than that of the open hole 11a, when users want to replace nose pad 30a, they have to apply tools and heavy strength to pull the insertion head 22a out of the open hole 11a. While installation and replacement, users have to apply heavy strength that might introduce scratches and breakage.

Another prior art shown in FIG 3, FIG 4 and FIG 5 is US Patent 6,079,825, it includes a nose rack 30b, a fastener 20b and a nose pad 2b; an open hole 31b is on the nose rack 30b, an insertion head 22b and a neck 21b are on the fastener 20b, a center slot 23b is on the insertion head 22b, the center slot 23b divides the insertion head 22b into two on the center area; the insertion head 22b is larger than the open hole 31b, when the insertion head 22b passes through the open hole 31b, the two sides of the insertion head 22b are pressed by the open hole 31b toward the center slot 23b and pass through the open hole 31b to install the fastener 20b on the nose rack 30b.

Based on the structure described above, the center slot 23b on the insertion head 22b offers compression space to let the insertion head 22b pass the open hole 31b easier, however the insertion head 22b will expand inside the open hole 31b after it passes through the open hole 31b, this arrangement makes the neck 21b cannot move freely in the open hole 31b that further results the fastener 20b and the nose pad 2b cannot be adjusted the sticking and supporting angle, the nose pad 2b cannot fit properly on users' noses, users might feel uncomfortable and irritation, the touching area of nose pad 2b and

users' noses might even swelling and painful.

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## **SUMMARY OF THE INVENTION**

It is therefore a primary object of the invention to provide a nose pad of eyeglasses that can be fixed stably, users can install and remove them easily.

It is a further object of this invention to provide a nose pad of eyeglasses that can avoid scratches and breakage during installation and removal.

In order to achieve the objective set forth, a nose pad of eyeglasses in accordance with the present invention comprises a nose rack, a fastener and a pad; an axis is on the nose rack, a sleeve corresponding to the axis is on the fastener, an insertion hole is on the sleeve for the axis to insert, the open of the insertion hole is smaller than the diameter of the axis.

Based on the structure described above, the axis and the sleeve combine the nose rack and fastener together, the open of the insertion hole is smaller than the diameter of the axis, the nose rack and fastener can be fixed stably; the sleeve can move freely inside the insertion hole, installation and removal are very convenient. The width of the stem is smaller than that of the open hole; users can adjust the nose pad anytime.

In the application, the axis and the sleeve combine the nose rack and fastener together, the open of the insertion hole is smaller than the diameter of the axis, the nose

rack and fastener can be fixed stably, the present invention has following advantages over the prior art:

1. Easy to assemble: a sleeve having elasticity with a insertion hole is on the fastener; while installation, users only have to have the insertion hole of the sleeve aim at the axis and push, the insertion hole of the sleeve opens slightly by the pressure from the axis, the insertion hole returns to normal after the insertion of the axis, the open of the insertion hole is smaller than the diameter of the axis to make the nose rack and fastener combine together, such assembly is fast and easy.

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- 2. Easy to disassemble: the sleeve has elasticity, while disassembly, users only have to pull the axis out from the insertion hole of the sleeve, the insertion hole opens slightly and the axis can be pulled out smoothly, the operation is fast and easy without any tool.
  - 3. No scratches and breakage: the top of the stem is very smooth without sharp point and is easy to install and remove without scratches and breakage, the usage life is longer.

### BRIEF DESCRIPTION OF THE DRAWINGS

The accomplishment of the above-mentioned object of the present invention will become apparent from the following description and its accompanying drawings which

disclose illustrative an embodiment of the present invention, and are as follows:

- FIG 1 is an assembly view of the prior art;
- FIG 2 is a perspective view of the prior art;
- 5 FIG 3 is another perspective view of the prior art;
  - FIG 4 is a cross-sectional view the prior art;
  - FIG 5 is another cross-sectional view the prior art;
  - FIG 6 is an assembly view of the present invention;
  - FIG 7 is a perspective view of the present invention;
- 10 FIG 8 is a cross-sectional view of the first application state of the present invention;
  - FIG 9 is a cross-sectional view of the second application state of the present invention;
  - FIG 10 is a cross-sectional view of the third application state of the present invention.

# DESCRIPTION OF THE PREFERRED EMBODIMENT

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Referring to FIG 6 and FIG 7, the present invention is composed of a nose rack 1, a fastener 2 and a pad 3; an axis 11 is on the nose rack 1, a sleeve 21 corresponding to the axis 11 is on the fastener 2, an insertion hole 22 is on the sleeve 21 for the axis 11 to insert, the open of the insertion hole 22 is smaller than the diameter of the axis 11.

Based on the structure described above, the present invention applies the axis 11 and

the sleeve 21 to combine the nose rack 1 and fastener 2 together, the open of the insertion hole 22 is smaller than the diameter of the axis 11, the nose rack 1 and fastener 2 can be fixed stably; the sleeve 21 can move freely inside the insertion hole 22, installation and removal are very convenient.

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In the real application, an open hole 12 is on the nose rack 1, the axis 11 in placed in the open hole 12, an stem 23 is on the fastener 2 and corresponds to the open hole 12, the insertion hole 22 and the sleeve 21 corresponding to the axis 11 are on the stem 23, the insertion hole 22 and the sleeve 21 of the stem 23 split the stem 23 into two portions to have the stem 23 stressed by evenly strength in installation and removal; the top of the stem 23 is very smooth for installation and removal without scratches and breakage; the width of the stem 23 is smaller than that of the open hole 12 for users to adjust the angle of the nose pad; FIG 8, FIG 9 and FIG 10 are three different application states.

While a preferred embodiment of the invention has been shown and described in detail, it will be readily understood and appreciated that numerous omissions, changes and additions may be made without departing from the spirit and scope of the invention.